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SEQUENCE LISTING

<110> Hubbell, Jeffrey A.
Elbert, Donald
Lutolf, Matthias
Pratt, Alison
Schoenmakers, Ronald
Tirelli, Nicola
Vernon, Brent

<120> BIOMATERIALS FORMED BY NUCLEOPHILIC ADDITION REACTION TO CONJUGATED UNSATURATED GROUPS

<130> 50154/002002

<140> 09/496,231
<141> 2000-02-01

<150> 60/118,093
<151> 1999-02-01

<160> 74

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<221> VARIANT
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<223> Xaa=any amino acid except Cys

<400> 3
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<221> VARIANT
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<223> Xaa=any amino acid except Cys

<400> 4
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<222> (1)...(7)
<223> Xaa=any amino acid except Cys

<400> 5
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 1   5

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<221> VARIANT
<222> (2)...(6)
<223> Xaa=any amino acid except Cys or Tyr

<221> VARIANT
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<223> Xaa=any amino acid except Cys or Tyr

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<221> VARIANT
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<400> 8
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 1   5

<210> 9
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Asn Asn Arg Asp Asn Thr
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<400> 10
Tyr Asn Arg Val Ser Glu
 1   5

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<400> 11
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 1   5

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<220>
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<400> 12
Gly Phe Arg His Arg His
 1   5

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<400> 13
Gly Tyr Arg Ala Arg Pro
 1   5

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<400> 14
Tyr Gln Lys Asn Asn Lys
 1   5

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<220>
<223> Based on Homo sapiens

<400> 15
Leu Ile Lys Met Lys Pro
 1   5

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<220>
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<400> 16
Asn Phe Lys Ser Gln Leu
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<400> 17
Glu Trp Lys Ala Leu Thr
 1   5

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<220>
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<400> 18
Ser Tyr Lys Met Ala Asp
 1   5

<210> 19
<211> 6
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<400> 19
Thr Gln Lys Lys Val Glu
 1   5

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<220>
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<400> 20
Arg Gln Lys Gln Val Lys
 1   5

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<223> Based on Homo sapiens

<400> 21
Gln Val Lys Asp Asn Glu
 1   5

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<211> 6
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<220>
<223> Based on Homo sapiens

<400> 22
Leu Ile Lys Ala Ile Gln
 1   5

<210> 23
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<220>
<223> Based on Homo sapiens

<400> 23
Thr Leu Lys Ser Arg Lys
 1   5

<210> 24
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<220>
<223> Based on Homo sapiens

<400> 24
Ser Arg Lys Met Leu Glu
 1   5

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<220>
<223> Based on Homo sapiens, Bos taurus and Gallus
      gallus

<400> 25
Pro Gln Gly Ile Ala Gly
 1   5

<210> 26
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<213> Bos taurus

<400> 26
Pro Gln Gly Leu Leu Gly
 1   5

<210> 27
<211> 6
<212> PRT
<213> Gallus gallus

<400> 27
Pro Gln Gly Ile Leu Gly
 1   5

<210> 28
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<220>
<223> Based on Gallus gallus and Homo sapiens

<400> 28
Pro Gln Gly Leu Ala Gly
 1   5

<210> 29
<211> 6
<212> PRT
<213> Homo sapiens

<400> 29
Pro Leu Gly Ile Ala Gly
 1   5

<210> 30
<211> 6
<212> PRT
<213> Homo sapiens

<400> 30
Pro Leu Gly Leu Trp Ala
 1   5

<210> 31
<211> 6
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<400> 31
Pro Leu Gly Leu Ala Gly
 1   5

<210> 32
<211> 8
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<220>
<223> Based on Homo sapiens

<400> 32
Gly Pro Gln Gly Ile Ala Gly Gln
 1   5

<210> 33
<211> 8
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<220>
<223> Based on Homo sapiens

<400> 33
Gly Pro Val Gly Ile Ala Gly Gln
 1   5

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<220>
<223> Based on Homo sapiens

<400> 34
Gly Pro Gln Gly Val Ala Gly Gln
 1   5

<210> 35
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Based on Homo sapiens

<400> 35
Gly Pro Gln Gly Arg Ala Gly Gln
 1   5

<210> 36
<211> 8
<212> PRT
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<220>
<223> Based on Homo sapiens

<400> 36
Gly Pro Gln Gly Ile Ala Ser Gln
 1   5

<210> 37
<211> 8
<212> PRT
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<220>
<223> Based on Homo sapiens

<400> 37
Gly Pro Gln Gly Ile Phe Gly Gln
 1   5

<210> 38
<211> 8
<212> PRT
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<220>
<223> Based on Homo sapiens

<400> 38
Gly Pro Gln Gly Ile Trp Gly Gln
 1   5

<210> 39
<211> 4
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<220>
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<400> 39
Arg Gly Asp Ser
 1

<210> 40
<211> 4
<212> PRT
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<220>
<223> Based on Homo sapiens

<400> 40
Arg Glu Asp Val
 1

<210> 41
<211> 4
<212> PRT
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<220>
<223> Based on Homo sapiens

<400> 41
Arg Gly Asp Val
 1

<210> 42
<211> 5
<212> PRT
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<220>
<223> Based on Homo sapiens

<400> 42
Leu Arg Gly Asp Asn
 1   5

<210> 43
<211> 5
<212> PRT
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<220>
<223> Based on Homo sapiens

<400> 43
Ile Lys Val Ala Val
 1   5

<210> 44
<211> 5
<212> PRT
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<220>
<223> Based on Homo sapiens

<400> 44
Tyr Ile Gly Ser Arg
 1   5

<210> 45
<211> 5
<212> PRT
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<220>
<223> Based on Homo sapiens

<400> 45
Pro Asp Ser Gly Arg
 1   5

<210> 46
<211> 10
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<220>
<223> Based on Homo sapiens

<400> 46
Arg Asn Ile Ala Glu Ile Ile Lys Asp Ala
 1   5   10

<210> 47
<211> 4
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<220>
<223> Based on Homo sapiens

<400> 47
Arg Gly Asp Thr
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<210> 48
<211> 4
<212> PRT
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<220>
<223> Based on Homo sapiens

<400> 48
Asp Gly Glu Ala
 1

<210> 49
<211> 4
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<221> VARIANT
<222> (1)...(4)
<223> Xaa=any amino acid

<400> 49
Val Thr Xaa Gly
 1

<210> 50
<211> 6
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<223> Based on Homo sapiens

<221> VARIANT
<222> 1,4,6
<223> Xaa=Met, Leu, Ala, Ile, Val, Phe, or Pro

<221> VARIANT
<222> 2,3,5
<223> Xaa=Arg or Lys

<400> 50
Xaa Xaa Xaa Xaa Xaa Xaa
 1   5

<210> 51
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Based on Homo sapiens

<400> 51
Pro Arg Arg Ala Arg Val
 1   5

<210> 52
<211> 19
<212> PRT
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<220>
<223> Based on Homo sapiens

<400> 52
Tyr Glu Lys Pro Gly Ser Pro Pro Arg Glu Val Val Pro Arg Pro Arg
 1   5   10   15
Pro Gly Val

<210> 53
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Based on Homo sapiens

<400> 53
Arg Pro Ser Leu Ala Lys Lys Gln Arg Phe Arg His Arg Asn Arg Lys
 1   5   10   15
Gly Tyr Arg Ser Gln Arg Gly His Ser Arg Gly Arg
            20   25

<210> 54
<211> 17
<212> PRT
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<220>
<223> Based on Homo sapiens

<400> 54
Arg Ile Gln Asn Leu Leu Lys Ile Thr Asn Leu Arg Ile Lys Phe Val
 1   5   10   15
Lys

<210> 55
<211> 14
<212> PRT
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<223> Based on Homo sapiens

<221> MOD_RES
<222> 2
<223> Xaa=bAla

<400> 55
Lys Xaa Phe Ala Lys Leu Ala Ala Arg Leu Tyr Arg Lys Ala
 1   5   10

<210> 56
<211> 14
<212> PRT
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<220>
<223> Based on Homo sapiens

<400> 56
Lys His Lys Gly Arg Asp Val Ile Leu Lys Lys Asp Val Arg
 1   5   10

<210> 57
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<212> PRT
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<220>
<223> Based on Homo sapiens

<400> 57
Tyr Lys Lys Ile Ile Lys Lys Leu
 1   5

<210> 58
<211> 9
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<220>
<223> Based on Homo sapiens

<400> 58
Gly Cys Tyr Lys Asn Arg Asp Cys Gly
 1   5

<210> 59

<211> 16
<212> PRT
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<220>
<223> Based on Homo sapiens

<400> 59
Gly Cys Asp Asp Gly Pro Gln Gly Ile Trp Gly Gln Asp Asp Cys Gly
 1   5   10   15

<210> 60
<211> 16
<212> PRT
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<220>
<223> Based on Homo sapiens

<400> 60
Gly Cys Arg Asp Gly Pro Gln Gly Ile Trp Gly Gln Asp Arg Cys Gly
 1   5   10   15

<210> 61
<211> 11
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<220>
<223> Based on Homo sapiens

<400> 61
Gly Cys Gly Tyr Gly Arg Gly Asp Ser Pro Gly
 1   5   10

<210> 62
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<220>
<223> Based on Homo sapiens

<221> MOD_RES
<222> 1
<223> Xaa=acetylated Gly

<400> 62

Xaa Cys Gly Tyr Gly Arg Gly Asp Ser Pro
1 5 10

<210> 63
<211> 13
<212> PRT
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<220>
<223> Based on Homo sapiens

<400> 63
Gly Asp Gly Ser Gly Tyr Gly Arg Gly Asp Ser Pro Gly
1 5 10

<210> 64
<211> 9
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<213> Artificial Sequence

<220>
<223> Based on Homo sapiens

<400> 64
Gly Cys Gly Tyr Gly Arg Gly Asp Ser
1 5

<210> 65
<211> 14
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<223> Based on Homo sapiens

<400> 65
Gly Lys Lys Lys Lys Gly Cys Tyr Lys Asn Arg Asp Cys Gly
1 5 10

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<220>
<223> Based on Homo sapiens

<400> 66
Gly Cys Tyr Lys Asn Arg Asp Cys Gly
1 5

<210> 67
<211> 13
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<220>
<223> Based on Homo sapiens

<400> 67
Gly Cys Cys Gly His His His His His Gly Cys Cys Gly
1 5 10

<210> 68
<211> 9
<212> PRT
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<220>
<223> Based on Homo sapiens

<400> 68
Gly Cys Tyr Lys Asn Arg Asp Cys Gly
1 5

<210> 69
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<400> 69
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1 5 10 15
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20 25 30
Leu Pro Val Glu Leu Glu Ser Ser Ser His Pro Ile Phe His Arg Gly
35 40 45
Glu Phe Ser Val Cys Asp Ser Val Ser Val Trp Val Gly Asp Lys Thr
50 55 60
Thr Ala Thr Asp Ile Lys Gly Lys Glu Val Met Val Leu Gly Glu Val
65 70 75 80
Asn Ile Asn Asn Ser Val Phe Lys Gln Tyr Phe Phe Glu Thr Lys Cys

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Arg Asp Pro Asn Pro Val Asp Ser Gly Cys Arg Gly Ile Asp Ser Lys
            100                 105                 110
His Trp Asn Ser Tyr Cys Thr Thr Thr His Thr Phe Val Lys Ala Leu
        115                 120                 125
Thr Met Asp Gly Lys Gln Ala Ala Trp Arg Phe Ile Arg Ile Asp Thr
    130                 135                 140
Ala Cys Val Cys Val Leu Ser Arg Lys Ala Val Arg
145                 150                 155
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tctgtatggg taggcgataa aaccactgcc actgatatca aaggcaaaga ggtgatggtg 180
ctgggagaag taaacattaa caactctgta ttcaaacagt acttcttcga aactaagtgc 240
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tactgcacca ctactcacac tttcgttaaa gcgttgacta tggatggtaa acaggctgcc 360
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taaggatcc 429

<210> 71
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<221> MOD_RES
<222> 5
<223> Xaa=bAla

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Ala
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<210> 72
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<220>
<223> Based on Homo sapiens

<221> VARIANT
<222> (1)...(5)
<223> Xaa is any amino acid

<400> 72
Xaa Xaa Xaa Xaa Tyr
 1   5

<210> 73
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<220>
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<400> 73
Gly Lys Lys Lys Lys
 1   5

<210> 74
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Gly Arg Gly Asp Ser Pro Gly
 1   5